

Running head: Management Representativeness and Interpersonal Mistreatment

Investigating Why and for Whom Management Ethnic Representativeness Influences
Interpersonal Mistreatment in the Workplace

Alex P. Lindsey¹, Derek R. Avery^{*2}, Jeremy F. Dawson^{*3}, and Eden B. King^{*4}

Indiana University – Purdue University Indianapolis¹

Wake Forest University²

University of Sheffield³

George Mason University⁴

*Authors contributed equally and authorship was determined alphabetically

Corresponding Author:

Alex Lindsey (aplindse@iupui.edu)

Phone: 317-274-6948

Indiana University – Purdue University Indianapolis

Department of Psychology, LD 124

402 N. Blackford Street

Indianapolis, IN 46202-3275

This is the author's manuscript of the article published in final edited form as:

Lindsey, A. P., Avery, D. R., Dawson, J. F., & King, E. B. (2017). Investigating why and for whom management ethnic representativeness influences interpersonal mistreatment in the workplace. *Journal of Applied Psychology*, 102(11), 1545–1563. <https://doi.org/10.1037/apl0000238>

Abstract

Preliminary research suggests that employees use the demographic makeup of their organization to make sense of diversity-related incidents at work. We build on this work by examining the impact of management ethnic representativeness - the degree to which the ethnic composition of managers in an organization mirrors or is misaligned with the ethnic composition of employees in that organization. To do so, we integrate signaling theory and a sense-making perspective into a relational demography framework to investigate why and for whom management ethnic representativeness may have an impact on interpersonal mistreatment at work. Specifically, in three complementary studies, we examine the relationship between management ethnic representativeness and interpersonal mistreatment. First, we analyze the relationship between management ethnic representativeness and perceptions of harassment, bullying, and abuse the next year, as moderated by individuals' ethnic similarity to others in their organizations in a sample of 60,602 employees of Britain's National Health Service. Second, a constructive replication investigates perceived behavioral integrity as an explanatory mechanism that can account for the effects of representativeness using data from a nationally representative survey of working adults in the United States. Third and finally, online survey data collected at two time points replicated these patterns and further integrated the effects of representativeness and dissimilarity when they are measured using both objective and subjective strategies. Results support our proposed moderated mediation model in which management ethnic representation is negatively related to perceived mistreatment through the mediator of perceived behavioral integrity, with effects being stronger for ethnically dissimilar employees.

Keywords: discrimination; mistreatment; signaling theory; relational demography; representativeness

Investigating Why and for Whom Management Ethnic Representativeness Influences Interpersonal Mistreatment in the Workplace

The demographic characteristics of organizations can shape the way people experience and understand diversity in the workplace. Indeed, when an executive board is diverse, organizational outsiders use this information to infer that diversity is genuinely valued by the organization, which can in turn affect the organization's reputation for fairness and innovative performance (Miller & Triana, 2009). Preliminary research also suggests that employees use the demographic makeup of their organization to make sense of diversity-related incidents at work (Roberson & Stevens, 2006). Moreover, emerging evidence suggests that workforce diversity can signal to employees that the organization values diversity, but the nature of this relationship depends on the diversity of the community in which the organization is embedded (Pugh, Dietz, Brief, & Wiley, 2008). Equally important, yet previously unexplored, may be the ethnic composition of organizational leaders relative to the employees they manage. Here we examine the impact of management ethnic representativeness – the degree to which the ethnic composition of managers in an organization mirrors or is misaligned with the ethnic composition of employees in that organization. To do so, we integrate signaling theory and a sense-making perspective into a relational demography framework (Tsui & O'Reilly, 1989) to investigate why and for whom management ethnic representativeness may have an impact on interpersonal mistreatment at work.

This research identifies meaningful negative consequences of demographic misalignments between the composition of managers and their subordinates. Prior scholarship demonstrates that organizational demography can shape employees' workplace experiences; we know that demographic composition matters (e.g., Avery, McKay, & Wilson, 2008). Previous

studies also show that the demographic profile of organizational leaders sends a signal to prospective employees about the organization (e.g., Miller & Triana, 2009). What we did not yet know, prior to the current research, is whether the alignment between the demography of the organization and the demography of leaders also matters, and if so, for whom, why, and to what effect? Indeed, the previously unexplored problem here is that the demographic characteristics of managers do not always match the characteristics of employees. This is a timely focus because demographic diversity is increasing among workers at a higher rate than it is among managers and an important focus because differences can give rise to challenges. Here, we directly examine the impact of management ethnic representativeness to provide robust answers to the aforementioned research questions. In so doing, this research will build understanding of the implications of demographic misalignments across organizational levels.

Thus, the current work shapes and extends scholarly discourse in several meaningful ways. First, at the broadest level, we uniquely synthesize signaling and relational demography theories with a sense-making perspective. Our consideration of management representativeness is an important departure from traditional views of relational demography, which largely focus on the social identity processes (e.g., similarity-attraction) that arise when (a) supervisor-subordinate pairs or (b) an employee and his or her colleagues share demographic characteristics (e.g., Avery, McKay, & Wilson, 2008). Instead, we radically shift focus to the distinct phenomenon of signaling, the psychological process of inferring unknown information from visible cues. Second, while signaling theory is typically used to explain how organizational outsiders react to organizational signals (see Connelly, Certo, Ireland, & Reutzel, 2011), this paper represents one of the first integrations of signaling theory, a sense-making perspective, and relational demography to explain why and for whom a signal from an organization (i.e.,

management ethnic representativeness) may have an impact on individuals already working within that organization. By focusing on incumbent employees as interpreters of signals, we show that the utility of signaling theory extends beyond external stakeholders and also can explain phenomena occurring within an organization. Third, by triangulating across samples and using multiple measurement strategies, we provide robust evidence regarding why (via the explanatory mechanism of perceived behavioral integrity) and for whom (via the exacerbating effects of ethnic dissimilarity) management ethnic representativeness has an effect on experiences of interpersonal mistreatment in the workplace. This contribution should not be overlooked, as the mechanisms through which demography is typically understood are very distinct from mechanisms that drive signal effectiveness. Finally, we build on a nascent body of previous work regarding minority representation in an organization and its alignment with the community in which it is embedded by considering the alignment of representativeness within an organization and across organizational levels.

Specifically, in three complementary studies, we investigate the relationship between management ethnic representativeness and interpersonal mistreatment. First, we analyze the relationship between management ethnic representativeness and experiences of harassment, bullying, and abuse the next year, as moderated by individuals' ethnic similarity to others in their organizations in a sample of 60,602 employees of Britain's National Health Service. Second, a constructive replication investigates perceived behavioral integrity as an explanatory mechanism that can account for the effects of representativeness using data from a nationally representative survey of working adults in the United States. Third and finally, online survey data collected at two time points replicated these patterns and further integrated the effects of representativeness and dissimilarity when they are measured using both objective and subjective strategies.

Collectively, these studies contribute to the extant literature by explaining why and for whom management ethnic representativeness affects interpersonal mistreatment at work.

Management Ethnic Representativeness

We define management ethnic representativeness as the degree to which the ethnic composition of managers in an organization mirrors or is misaligned with the ethnic composition of employees in that organization. Similar to previous conceptualizations of relational demography examining similarity between an employee and supervisor (Avery et al., 2008) or between an employee and their work group (Tsui et al., 1992), we assert that management ethnic representativeness is an objective variable that can be calculated using organizational demographic data. The key difference with management ethnic representativeness is that this construct captures demographic similarity beyond an individual employee-supervisor or employee-workgroup pairing. Indeed, management ethnic representativeness is a relational demography construct at the organizational level of analysis, capturing the degree to which the ethnic composition of managers in an organization overall is either similar to or different from the ethnic composition of the employees those managers serve. Importantly, while this construct can be calculated objectively using organizational demographic data, it can also be measured more subjectively by surveying individuals in an organization regarding the degree to which they perceive that managers in an organization have a similar demographic profile when compared to the employees that they serve.

Drawing from previous work on relational demography and signaling theory, we assert that management ethnic representativeness has a negative relationship with interpersonal mistreatment because a lack of this representativeness signals to incumbent employees that there is not truly equal opportunity with regard to ethnicity for advancement within the organization.

Importantly, this reasoning holds true regardless of the level of demographic diversity within the organization. To demonstrate, consider the following examples. On the one hand, an organization might have no ethnic diversity whatsoever (i.e., all White employees and all White managers). This would result in high management ethnic representativeness and signal to incumbent employees that they have an equal opportunity for advancement within their organization with regard to ethnicity. On the other hand, consider an organization that has very little ethnic diversity among their employees (e.g., 10 in 100 employees are Hispanic whereas the other 90 are White) and very little ethnic diversity among their managers (e.g., one in ten managers is Hispanic and the others are White). Although diversity in the organization overall remains low, management ethnic representativeness would still be high in this example, given that the ethnic diversity in management mirrors the ethnic diversity in the rest of the organization. Thus, this level of representativeness still signals to all incumbent employees that they have an equal opportunity for advancement with regard to ethnicity, which we argue serves to minimize perceptions and experiences of mistreatment in the workplace. Finally, consider an organization that has a considerable amount of ethnic diversity among employees, all of whom are overseen by White managers. While ethnic diversity in the organization overall may be relatively high, management ethnic representativeness would be very low in this example, which we assert sends problematic signals to both targets and perpetrators of mistreatment. Note that this theoretical logic applies strictly to incumbents currently working in an organization, not to prospective applicants.

Theoretical Foundation

Signaling theory is based on the idea that some parties (in our case, the organization) have information that other parties (in our case, employees of the organization) do not. Hence,

employees need to use signals (in our case, the demographic representativeness of management) to determine the character of their employing organization. Signaling theory focuses primarily on the deliberate communication of positive information in an effort to convey positive organizational attributes to stakeholders. An important assumption of this theory is that there is some level of information asymmetry between the organization and its stakeholders, and both parties are at least somewhat motivated to reduce that asymmetry (Spence, 2002). In our case, an organization may claim that it values equal opportunity, but organizational leaders have more information than their stakeholders regarding the degree to which the organization truly possesses this value. Thus, employees (both targets and perpetrators of mistreatment) may need to look for signals from the organization when determining if they work for a firm that truly provides equal opportunity to its employees or not.

Another important assumption of signaling theory is that some signals are more effective than others. Indeed, theory and research support the notion that more observable signals tend to be more efficacious signals (Connelly et al., 2011). Signal observability refers to how visible a signal is to signal recipients. It stands to reason that if a signal is not visible, it probably will not have much of an effect on signal recipients. In our case, management ethnic representativeness is a highly visible signal that is likely to be observed by employees of an organization. This representativeness is also likely high on signal frequency (Janney & Folta, 2003), meaning that employees view this signal just about every day at work. Importantly, empirical work on signaling theory has indicated that 1) more visible signals are more effective (Miller & Triana, 2009), and 2) increasing signal frequency improves the likelihood that a signal will be interpreted correctly (Filatotchev & Bishop, 2002).

Observability is considered to be a necessary but insufficient characteristic of efficacious signals; indeed, effective signals are also difficult to fake, making them more likely to be interpreted as honest signals (Connelly et al., 2011). Using signaling theory terminology, management ethnic representativeness is also something that is likely to be interpreted as an honest signal by employees (Durcikova & Gray, 2009). The idea behind this notion is that accurate (i.e., honest) information can be exchanged between two parties if sending a signal requires effort on the part of the sender that only certain senders (i.e., organizations that actually value equal opportunity) are likely to exhibit. This is called the handicap principle (Zahavi & Zahavi, 1977) and indicates that an organization high on management ethnic representativeness likely truly promotes and values equal opportunity for incumbent employees, regardless of their ethnic backgrounds, within their organization. Indeed, we assert that high management ethnic representativeness signals that an organization is invested in ensuring that all employee perspectives, relative to ethnicity, are represented across managerial levels. The opposite of an honest signal would be if an organization states or implies that it values equal opportunity but then does not have an ethnic profile in management that is representative of the organization as a whole. Westphal and Zajac (2001) refer to this discrepancy between stated values and subsequent actions as decoupling. Organizations that decouple their espoused values (i.e., equal opportunity) and subsequent actions may develop a reputation for dishonesty, and employees may infer that they cannot trust what the organization says they value as a result. If a company has ethnically representative management, it signals that they have followed through on their valuation of equal opportunity. If not, it signals that their behavior cannot be trusted to match with their intentions. Importantly, studies from multiple domains using signaling theory have

indicated that honest signals are perceived as more credible, reliable, and valid (e.g., Certo, Daily, & Dalton, 2001; Lee, 2011).

A final important assumption of signaling theory is that not everyone will perceive and interpret a signal in the same manner. This refers to the signaling theory concepts of receiver attention and receiver interpretation. Receiver attention reflects differences in the degree to which receivers are vigilantly scanning their environment for signals (Connelly et al., 2011). Empirical work has demonstrated that the effectiveness of a signal can depend in large part on whether receivers are actively looking for a signal (Gulati & Higgins, 2003). Receiver interpretation refers to differences in how a signal is interpreted after it is noticed (Perkins & Hendry, 2005; Srivastava, 2001). For example, different applicants may calibrate or weight signals differently when forming their impression of an organization during recruitment and/or selection processes (Highhouse et al., 2007; Rynes, 1991).

While signaling theory and theories of relational demography may appear to produce similar predictions in terms of the effects of representativeness on interpersonal mistreatment, it is important to clearly specify both the relevant levels of analysis and the particular mechanisms underpinning the anticipated effects of each theory. Relational demography theory, which largely focuses on the dyadic level of analysis, argues that similarity influences interpersonal experiences (including mistreatment). Organizational demography theory generally contends that organizational diversity influences these experiences. Both effects are typically argued to impact experience via social identity processes such as similarity-attraction. Our focus on representativeness necessitates changing lenses of both the independent variable and the mediating mechanisms. Management representativeness is not the same as diversity. The focus in this construct is not whether an organization is diverse or whether a supervisor and employee

are of the same ethnicity. Instead, this construct captures the degree to which managers' ethnic backgrounds match the ethnic backgrounds of lower level employees. Thus, the immediate effect of high or low levels of representativeness is not a social identity process like similarity-attraction. Instead, the immediate impact of representativeness is the signal it sends to employees, and the heuristics that employees use to interpret signals are quite different in signaling theory as compared to social identity theory. Indeed, signaling theory is particularly relevant to management ethnic representativeness (which indicates a commitment to equal employment that conveys trustworthiness and honesty) and not necessarily as relevant to traditional demography perspectives (which focus on two parties being similar on the surface, and thus more compatible on a deeper level).

Management scholars have used signaling theory to explain how board characteristics (Certo, 2003) and top management team characteristics (Lester, Certo, Dalton, Dalton, & Cannella, 2006) influence important variables such as investments and organizational performance. The basic notion behind these studies is that having more prestigious board members signals to stakeholders that they should be confident in the direction and future performance capabilities of a firm. Similarly, Miller and Triana (2009) showed that having more heterogeneous board members with regard to gender and ethnicity served to increase the firm's reputation, which the authors argue was driven by signaling a valuation of egalitarianism to external stakeholders. While these and other management studies use signaling theory to demonstrate how signals may affect organizational outsiders, we assert that a key group of signal recipients – individuals currently working in the organization – has yet to be examined in the literature. Thus, in the section that follows we explain why and for which incumbent employees

management ethnic representativeness may be an important signal when considering how this representativeness relates to interpersonal mistreatment in the workplace.

Management Ethnic Representativeness Signals Interpersonal Mistreatment

Following Devine's (1989) seminal work on the manifestations of bias beyond one's conscious control, several authors have argued and supported the notion that modern discrimination manifests itself in various forms that vary in terms of their subtlety and severity (e.g., Brief, Dietz, Cohen, & Pugh 2000; Swim, Mallett, & Stangor, 2004; Jones et al., 2013). Despite these advances, many research studies still focus solely on overt discrimination rather than examining interpersonal mistreatment in a more holistic manner. Our work represents an important departure from this pattern by focusing on the broader outcome of interpersonal mistreatment, which we define as an umbrella term encompassing a wide range of negative interpersonal behaviors, including emotional abuse, bullying, generalized workplace abuse, incivility, verbal aggression, disrespect, isolation, and discrimination (Lim & Cortina, 2005).

We know from previous empirical work that relational demography – similarity to the people with whom we work – matters for this outcome of interest. Relational demography is grounded in social identity theory (Tajfel & Turner, 1986) and predicts that greater demographic similarity to those in one's workplace environment should lead to greater perceptions of fairness and less interpersonal mistreatment. Indeed, emerging evidence suggests that demographic representativeness of organizations relative to their surrounding communities matters for both interpersonal experiences and organizational performance (e.g., King et al., 2011; Avery et al., 2012). Because interpersonal experiences of mistreatment and discrimination are often subtle and difficult to interpret (Jones, Peddie, Gilrane, King, & Gray, 2013), the effects of relational demography can best be examined using a sense-making framework.

Using a sense-making perspective, organizations can be thought of as networks of shared meaning that are developed and maintained via social interaction (Walsh & Ungson, 1991). These social interactions in the workplace often present employees with ambiguous situations that can be interpreted in a number of ways (Weick, 1979). Sense-making can then be defined as the attributional process of assigning meaning to these ambiguous organizational events (Weick, 1995). The sense-making process is grounded in identity development and asserts that people interpret situations in a manner that is consistent with self-identities (Ring & Van de Ven, 1989). As part of this process, individuals tend to categorize themselves and others in ways that will help them to interpret ambiguous social situations. Importantly, people often rely on readily perceivable physical features such as ethnicity (Fiske & Taylor, 1991) to guide their interpretations and spontaneous categorization processes (Jackson, Stone, & Alvarez, 1993). Indeed, Roberson and Stevens (2006) stated, “to the extent that an organization has employees with visibly diverse demographics, such diversity is likely to be a significant feature in spontaneous sense-making in that workplace” (p. 380). Similarly, McKay and Avery (2006) referred to the presence of minority employees as “direct and unambiguous diversity cues” (p. 400).

The forgoing discussion indicates that management ethnic representativeness likely matters for employees within an organization. Signaling theory provides us with an explanation for why it matters and for whom it might matter most. As alluded to earlier, management ethnic representativeness is an organizational signal that is likely to be perceived as honest (i.e., an organization with high management ethnic representativeness positions likely promotes equal opportunity) and highly visible and thus likely has an impact on interpersonal mistreatment in the workplace. Of course, the content of the cue is also important to consider when predicting how

stakeholders will react to an organizational signal and what organizational qualities that signal may indicate. For instance, a high profile discrimination lawsuit is an honest and visible signal that might actually increase interpersonal mistreatment because it sends a negative signal regarding an organizational quality, namely that the organization does not value equal opportunity. Conversely, we assert that management ethnic representativeness is an honest and visible signal that reduces interpersonal mistreatment at work by communicating that equal opportunity is valued. Indeed, scholars have theorized that people engage in harassment and mistreatment behaviors to maintain the social hierarchy within an organization (Berdahl, 2007). We would argue that this tendency to engage in mistreatment to maintain the status quo is diminished in an organization that is ethnically representative across organizational levels, thereby communicating its provision of opportunity to all of its employees.

Supporting this view, relational demography research generally has shown individuals who are more demographically similar to those in their workplace experience more supportive work environments and less discrimination (Tsui & Gutek, 1999). Indeed, representation of ethnic minorities in management positions serves as a readily observable cue through which employees can understand the meaning of their ethnicity in a given workplace context (McKay & Avery, 2006). Thus, when confronted with an ambiguous situation that one needs to make sense of, those working in a more representative organization will be less likely to categorize that situation as mistreatment when compared with employees working in less representative organizations. We assert that representativeness may have an even stronger effect when individuals are reacting to representativeness in management. While we do not know of any research that directly supports this notion, we would note that managers and leaders are high status members of organizations, which may strengthen the signal strength of representativeness

at this level. There are some studies in the extant literature that indirectly support this notion. For example, work by Thomas (1999) has shown that having Blacks in leadership positions led White leaders to be more apt to mentor Black subordinates. Additionally, we know from work on gender and leadership that the presence of similar female leaders can serve as a signal to female employees that empowers women to be more effective on leadership tasks (Latu, Mast, Lammers, Bombari, 2013) and reduces self-stereotyping (Asgari, Dasgupta, & Stout, 2012). Formally, we hypothesize the following:

Hypothesis 1: Management ethnic representativeness will have a negative relationship with interpersonal mistreatment, such that greater levels of representativeness are associated with lower levels of interpersonal mistreatment.

We further assert that ethnic dissimilarity moderates the relationship proposed in Hypothesis 1. Importantly, while some conceptualizations of ethnic dissimilarity use one's supervisor or one's workgroup as the referent point, we take a broader approach here to examine individuals' ethnic dissimilarity from others in their organizations as a whole. Given that our independent variable is management ethnic representativeness throughout one's entire organization, we felt that this conceptualization of dissimilarity aligned most closely with the other variables represented in our theoretical model.

Scholars have noted previously that ethnicity is a source of status, with some ethnic groups being perceived as having higher status than others (see Leslie, 2014). Indeed, ethnic minorities are considered lower status groups than Whites in the United States (Simpson & Walker, 2002) and in the United Kingdom, and are often stigmatized as less capable employees (Lyness & Heilman, 2006). This can create a burden of proving oneself as a good employee that is more challenging for ethnically dissimilar others when compared with the dominant group

(Heilman, 2001). These different standards could increase the likelihood that ethnic minorities are 1) cognizant and aware of the potential to be mistreated, and 2) aware of the signal sent by the organization via management ethnic representativeness. Using signaling theory terminology discussed earlier, we assert that more ethnically dissimilar others should be higher on receiver attention and more accurate in terms of receiver interpretation. Indeed, research and theory indicate that individuals are more likely to attend to ethnicity of others when members of their own ethnic group are rare. This has been referred to as distinctiveness (McGuire, 1984) and tokenism (Kanter, 1977) and indicates that the ethnic identities of the self and others will be more salient for ethnically dissimilar others when compared with their more similar counterparts. Furthermore, demographic similarity to others in one's organization has been shown to enhance feelings of inclusion, trust, and support (Foley, Linnehan, Greenhaus, & Weer, 2006; Pelled, Ledford, & Mohrman, 1999). Thus, we predict the following:

Hypothesis 2: Ethnic dissimilarity will moderate the relationship between management representativeness and mistreatment, such that the relationship will be stronger for ethnically dissimilar individuals when compared with more ethnically similar individuals.

Importantly, most organizations do not want to be seen as discriminatory and thus strive to comply with norms surrounding equal opportunity for incumbent employees in hopes of gaining a sense of credibility and integrity among their constituents (van der Walt & Ingley, 2003). Thus, having managers that are ethnically representative of the employees they supervise may be an effective way to signal that the organization actually does value equal opportunity for incumbent employees, regardless of their ethnic backgrounds. Conversely, if an organization purports to possess this value yet lacks managerial ethnic representativeness, this may signal that the organization cannot be trusted to follow through on its espoused values regarding equal

opportunity. In the parlance of signaling theory, this refers to the notion of decoupling discussed previously. As noted, organizations that decouple their espoused values (i.e., equal opportunity) and subsequent actions (i.e., management ethnic representativeness) run the risk of developing a reputation for dishonesty and lose the trust of their constituents over time (Connelly et al., 2011). Thus, perceived behavioral integrity is a mechanism that can account for the relationship between the management ethnic representativeness and the interpersonal mistreatment of individuals within the organization.

Perceived behavioral integrity can be defined as “the perceived pattern of alignment between an actor’s words and deeds” (Simons, 2002, p. 19). Importantly, it captures the perceived match between espoused values and subsequent actions, and is a characteristic ascribed to management, thus entailing an internal attribution for an observed pattern of behavior (Simons, Friedman, Liu, & Parks, 2007). It stands to reason that if an organization matches their espoused values and behaviors with regard to valuing equal opportunity, perceived behavioral integrity would be high, which could then in turn reduce experiences and interpretations of interpersonal mistreatment at work. Conversely, if an organization decouples their espoused values and behaviors with regard to valuing equal opportunity, we would expect perceived behavioral integrity to be lower, which could then in turn increase interpersonal mistreatment in the workplace by communicating to employees that the organization does not take their valuation of equal opportunity seriously.

We assert that perceptions of behavioral integrity could impact interpersonal mistreatment at work for at least two reasons. First, perpetrators of mistreatment could notice if they work in an organization that is low on management ethnic representativeness and develop their own perceptions of low behavioral integrity. In turn, these perceptions may serve as a cue to

potential perpetrators of mistreatment that such behaviors are tolerable and acceptable within their organization, making them more likely to mistreat ethnically dissimilar others at work. Support for this assertion comes from research and theorizing on the concept of ethical leadership, which proposes that employees are likely to engage in more ethical decision-making, more prosocial behaviors, and less counterproductive work behaviors when they believe their leaders are ethical and trustworthy (see Brown & Treviño, 2006). Second, targets of mistreatment may use their own perceptions of behavioral integrity as a cue when engaging in sense-making processes to determine if they experienced mistreatment or not. It stands to reason that targets of mistreatment will be more likely to categorize inappropriate behaviors as such when they have lower perceptions of managers' behavioral integrity. Indeed, prior scholarship suggests lower behavioral integrity is related to diminished trust (Simons, 2002). Moreover, when employees lose trust in their organization and its decision-makers, they may be more apt to attribute ambiguous mistreatment to discrimination (Major & Sawyer, 2009).

Signaling theory further substantiates the role of perceived honesty: a core tenant of the theory is that signals interpreted as honest are more impactful than those interpreted as dishonest. The concept of perceived behavioral integrity is uniquely positioned to capture this honesty because it explicitly reflects the degree to which management in an organization is perceived as authentic. It follows that we argue that perceived behavioral integrity captures the process by which a signal from the organization could lead to important outcomes for individuals within that organization. Importantly, we do not wish to imply that perceived behavioral integrity is the only explanatory mechanism that can account for the effect of management ethnic representativeness on interpersonal mistreatment, which is why we only propose partial mediation here. Indeed, firms with greater management ethnic representativeness also may have different systems,

processes (diversity training), or cultures (of inclusiveness) which serve to reduce interpersonal mistreatment. Accordingly, we hypothesize the following:

Hypothesis 3: Perceived behavioral integrity will partially mediate the negative relationship between management ethnic representativeness and interpersonal mistreatment, such that the relationship between management ethnic representativeness and perceived behavioral integrity will be positive, and the relationship between perceived behavioral integrity and interpersonal mistreatment will be negative.

Perceptions of behavioral integrity also likely depend on characteristics of perceivers. In particular, sensitivity to matching behavioral actions with espoused values regarding equal opportunity is at least partially determined by the degree to which employees habitually assess their environments for integrity cues (Simons, 2002). Such vigilance is more common among people who feel different from others in their environment (e.g., Simons et al., 2007). Essentially, we assert that ethnically dissimilar individuals are more likely to be scanning their environments for integrity cues (i.e., they are high on receiver attention), making them more likely to infer behavioral integrity (or lack thereof) as it arises from management ethnic representativeness. Indeed, empirical work has shown that ethnically dissimilar individuals may be more sensitive to detecting behavioral integrity as it arises from organizational signals and reacting to it in the form of trust in management and justice perceptions (Simons et al., 2007). In turn, these perceptions of behavioral integrity that are linked with trust and justice beliefs could play an important role when employees (especially ethnically dissimilar employees) are making sense of diversity-related incidents at work and interpreting them as mistreatment or not. We assert that ethnically dissimilar employees are more likely to use perceived behavioral integrity

as a lens through which to interpret diversity-related incidents at work when compared to more ethnically similar employees. Thus, we hypothesize the following:

Hypothesis 4: Ethnic dissimilarity will moderate the indirect relationship between management representativeness and interpersonal mistreatment, such that effects will be stronger for ethnically dissimilar individuals when compared with more ethnically similar individuals. This moderation will occur at each stage of the mediation model.

We additionally investigate objective and subjective indicators of both management ethnic representativeness and ethnic dissimilarity. While an objective metric for management ethnic representativeness can be calculated using organizational data, a subjective metric for this variable also can be obtained by asking individuals directly the degree to which they perceive their ethnicity to be represented in management positions within their organizations. Similarly, while an objective metric for ethnic dissimilarity can be calculated using organizational data, a subjective metric for this variable can also be obtained by asking individuals directly the degree to which they perceive they are ethnically similar or dissimilar from others in their organizations. Given that organizations and scholars are likely use both types of indicators in their work, we felt that it was important to include this distinction in our work as well.

Specifically, we think it is logical to assume that objective management ethnic representativeness will have a positive relationship with subjective management ethnic representativeness, given that individuals likely use objective indicators of this variable in forming their perceptions. Indeed, signaling theory indicates that employees likely use objective organizational cues when forming their subjective organizational perceptions (Connelly et al., 2011). Additionally, empirical work on diversity climate has shown that numerical

representation cues are positively related to perceptions that an organization has a pro-diversity climate (McKay, Avery, & Morris, 2008). Thus, we formally hypothesize the following:

Hypothesis 5: Objective management ethnic representativeness will have a positive relationship with subjective management ethnic representativeness.

Additionally, we assert that both objective and subjective indicators of ethnic dissimilarity will have independent moderating effects on the aforementioned positive relationship, in addition to the other relationships in the mediation chain. Similar to previously introduced arguments, those who are more ethnically dissimilar to others in their organization are likely higher on the signaling theory concept of receiver attention, making them more likely to attend to objective indicators of management ethnic representativeness. This heightened attention should also increase receiver interpretation accuracy, making the relationship between objective and subjective indicators of management ethnic representativeness stronger for those more ethnically dissimilar to others in their workplace. In sum, we propose a moderated mediation model in which management ethnic representativeness is negatively related to interpersonal mistreatment through the mediating mechanism of perceived behavioral integrity. We further propose that the indirect effect is moderated by ethnic dissimilarity, such that the effects are stronger for ethnically dissimilar individuals when compared with those who are more ethnically similar to others in their organization (see Figure 1). While we only test hypotheses 1 and 2 in Study 1, we test more complete models with our Study 2 and Study 3 data. Importantly, we only examine the distinction between objective and subjective indicators of management ethnic representativeness and ethnic dissimilarity in Study 3.

Study 1: Method

Setting and Sample

Data were taken from the 2009 and 2010 national staff surveys of the National Health Service (NHS) in England (see

<http://discover.ukdataservice.ac.uk/catalogue/?sn=6570&type=Data%20catalogue#publications>

for more information on this database). This annual survey is administered to a sample of employees within each separate organisation in the NHS, known as “trusts”. A number of different types of organizations exist within the NHS, with the experiences of employees being substantially different within each, due to differing tasks and levels of patient contact (e.g. people working in ambulance trusts generally have very different jobs from those working in community health centres). To ensure participants were working in a similar context, we limit our analysis to employees working in “acute trusts” – typically individual hospitals, or a small number of geographically close hospitals working under a single management structure. For the sake of simplicity, we refer to these henceforth as “hospitals”, although in reality some cover more than one hospital building.

There were 147 hospitals in the 2009 and 2010 surveys. The hospital data can be linked by year, although for reasons of confidentiality the individual responses are not tracked longitudinally. Our analysis uses individual data from the 2010 survey, with hospital-level representativeness coming from the 2009 survey. The rationale for using lagged data is twofold. First, the data on mistreatment relates to mistreatment in the previous 12 months, whereas the data on ethnicity is current. Therefore, if we were to use data from one year only, the timing of the variables is not in line with the hypothesized direction of causality, and as there are moderate levels of turnover at many organizations, we cannot assume that the representativeness one year is the same as it is the next. Second, although we acknowledge that data on self-report ethnicity is likely to be very accurate and therefore that source of common method bias is unlikely to be an

issue, there are likely to be some small deviations in sample characteristics from year to year, and therefore by using data from two years we are reducing the chances of effects being due to sampling bias. In 2010 there were 60,602 responses from 118,801 distributed questionnaires (a response rate of 51%¹); the number of responses in each hospital varied between 275 and 581, with hospital-level response rates between 33% and 71%. Of these respondents, 85% classified themselves as White, 4% as Black or Black British, 8% as Asian or Asian British, 1% as Mixed ethnic background, and 2% as other ethnic background, with 3% not saying. Numbers from the 2009 survey were very similar on all counts.

Measures

Management ethnic representativeness (objective). Management ethnic representativeness, the independent variable, was captured from the 2009 survey data using the formula from Avery et al. (2012). Within each hospital, the representativeness was calculated to determine the extent to which employees in positions of line management (accounting for 30% of respondents) were representative of the remainder of the workforce according to the five major ethnic background categories used in the survey (and used in the UK Census): White, Black/Black British, Asian/Asian British, Mixed, or Other. This was measured at the hospital level. The index is scored between 0 and 1, where 1 represents perfect representativeness and 0 would represent no correspondence at all between the managers and the rest of the workforce.

Ethnic dissimilarity (objective). Ethnic dissimilarity, the moderator, was calculated using the Euclidean distance, as is common in relational demography research (Harrison & Klein, 2007). It measures the extent to which each individual is dissimilar in ethnic background to all other respondents in the same hospital in the 2010 survey, such that a higher score means that the individual shares his or her ethnic background with a smaller proportion of colleagues.

Interpersonal mistreatment. Mistreatment, the outcome, was an individual level variable calculated from two questions about aggression at work in the 2010 survey. Respondents were asked “In the last 12 months have you personally experienced physical violence at work from your manager/team leader or other colleagues?”, and “In the last 12 months have you personally experienced harassment, bullying or abuse at work from your manager/team leader or other colleagues?”. If the respondent answered “Yes” to either, they were recorded as having received mistreatment.

Control variables. We controlled for occupational group (seven categories), ethnic background (five categories), sex, age, and length of service. The latter two were measured on six-point ordinal scales (age: 16-20, 21-30, 31-40, 41-50, 51-65, or over 65; length of service: less than a year, 1-2 years, 3-5 years, 6-10 years, 11-15 years, or over 16 years).

Analysis

The analysis required multilevel modelling of a binary outcome, with predictors at both level 2 (hospital – representativeness) and individual (dissimilarity, as well as the control variables). A generalized linear mixed model (specifically, a multilevel binary logistic regression) was therefore used, with analysis conducted in Mplus. Due to some incomplete data (6.2% of cases had at least one value missing), maximum likelihood estimation was used.

Study 1: Results

Table 1 shows the descriptive statistics and correlations for all study variables at the individual level. The statistics for management ethnic representativeness applied at a hospital level are almost identical. Table 2 shows the results of models to test hypotheses 1 and 2. Model 1, testing the direct effect between management ethnic representativeness and mistreatment,

finds that the effect is not statistically significant (coefficient = -0.43, $p = 0.32$), therefore not supporting Hypothesis 1.

Model 2 tests the moderating effect of individual ethnic dissimilarity on the same relationship. It can be seen that the interaction term between management ethnic representativeness and ethnic dissimilarity is statistically significant (coefficient = -1.87, $p = .028$), suggesting that there is a moderating effect. The interaction term is negative, suggesting that the relationship between management ethnic representativeness and mistreatment is more negative for individuals who are more dissimilar to their colleagues in terms of ethnic background, thus providing support for Hypothesis 2. This interaction is shown graphically in Figure 2. It can be seen that, when dissimilarity is high (e.g. for an employee from an ethnic minority background in a hospital where the vast majority of the workforce is White), there is a negative relationship between representativeness and the probability of experiencing mistreatment: if the ethnic profile of managers in the hospital reflects the rest of the workforce, then the minority individual is less likely to experience interpersonal mistreatment. Although simple slope tests for continuous moderators are generally arbitrary (Dawson, 2014), calculating the effect of representativeness for typical low and high values of ethnic dissimilarity (values at the 10th and 90th percentiles) shows that the conditional odds ratios of the effect of representativeness for these values are 1.889 and 0.265 respectively. That is, at low levels of dissimilarity, there is a small positive relationship between representativeness and the likelihood of experiencing mistreatment; for high levels, there is a moderately large negative effect (using effect sizes as described by Haddock, Rindskopf & Shadish, 1998).

These results speak to the importance of attending to the alignment between managers and the employees they manage beyond simply focusing on representation. Indeed, if employers

seek to enhance representation of ethnic minorities in management positions without mirroring this representation at the employee level (which would reflect overrepresentation of ethnic minorities, as opposed to underrepresentation), this could actually lead to a detrimental increase in interpersonal mistreatment for employees within the organization. To test this notion empirically, we created a binary code for overrepresentation versus underrepresentation of ethnic minorities in management and tested this as a moderator of both the direct relationship between representativeness and interpersonal mistreatment and that same relationship as moderated by ethnic dissimilarity. Results revealed that this binary moderator did not have a significant effect on these relationships ($ps > .33$), supporting the generalizability of our findings and the notion that overrepresentation and underrepresentation may be equally detrimental in terms of engendering interpersonal mistreatment at work.

Study 1: Discussion

The purpose of Study 1 was to examine the hypothesized negative effect of management ethnic representativeness on interpersonal mistreatment at work. Furthermore, we investigated whether ethnic dissimilarity would moderate this effect, hypothesizing that the effects would be stronger for ethnically dissimilar employees when compared with more ethnically similar individuals. The results show that, although its main effect was not significant, management representativeness matters to employees differently depending on relational demography; a two-way interaction between management ethnic representativeness and ethnic dissimilarity emerged in predicting interpersonal mistreatment. Specifically, while the relationship between management ethnic representativeness and interpersonal mistreatment was negative for ethnically dissimilar individuals, this same relationship appears to be positive for more ethnically similar individuals. This means that while management ethnic representativeness engendered

lower levels of interpersonal mistreatment the following year among those who were ethnically dissimilar from those in their workplace, this same variable predicted higher levels of interpersonal mistreatment the following year among those who were more ethnically similar to those in their workplace. We interpret this positive relationship as an example of majority backlash (e.g., claims of reverse discrimination). Majority members (who would represent the largest share of those high in ethnic similarity) often feel a sense of entitlement to spoils such as higher level positions. In representative organizations, everyone present at lower levels has their fair share of these higher-level positions. Thus, expectations among majority members (of receiving a disproportionately high share) are violated, which could result in greater perceptions of mistreatment or claims of “reverse” discrimination. A further strength of this study is the use of lagged data: representativeness as measured in 2009 predicted mistreatment occurring between 2009 and 2010. The same moderated relationship was not found if we examined data within a single year only, probably because the mistreatment refers to a period prior to the measurement of representativeness. In the interest of replicating this finding, we also examined archival data from the previous two years. Although the interaction effect did not reach statistical significance when looking at data from 2008 to 2009, it did when examining data from 2007 to 2008, thus providing further support for our hypothesis. A limitation of this study is that representativeness is calculated on the basis of survey responses, rather than data about the whole organizations. Although we cannot know for certain whether responses are equally likely from all ethnic groups, we do note that the ethnic group profile of the survey respondents is very similar to that of the National Health Service as a whole, and therefore differential response rates by ethnic groups is unlikely to be a major problem (Health and Social Care Information Centre, 2011). In addition, the fact that most organizations in study 1 are predominantly White means

there is not as much variation to analyze as would be ideal. We conducted Study 2 to build on these findings while investigating perceived behavioral integrity as a mediator that can account for the moderated relationship between management ethnic representativeness and interpersonal mistreatment at work.

Study 2: Method

Sample and Procedure

We used data from the 2002 National Study of the Changing Workforce (Bond, Thompson, Galinsky, & Prottas, 2003; see <http://www.whenworkworks.org/effective/resources/national-study-of-the-changing-workforce> for more information on this database). Bond et al. telephoned individuals selected at random to inquire about a variety of subjects including issues of work–family and other more general workplace perceptions (Total individuals contacted = 2,390; response rate = 52%). All participants were civilian, wage-earning employees, and we included only the responses of those with complete data on the measures of interest described below ($N = 1,575$). The usable sample included slightly more women ($n = 864$) than men ($n = 711$), and was 76.9% White, 10.7% Black, 6.9% Hispanic, and 5.5% belonging to a different ethnic background. The average participant was 42 years of age ($SD = 12.4$) and had been with the company for about 8 years ($SD = 8.7$). The most frequently reported occupations included: 14.5% retail trade, 14.0% manufacturing, 12.1% medical service, and 11.2% educational services.

Measures

Interpersonal mistreatment. Similar to prior studies (e.g., Avery et al., 2008), we employed the following item to indicate whether or not the participant had experienced mistreatment on the basis of their ethnic group membership: “Do you feel in ANY way

discriminated against on your job because of your race or national origin?” Responses were coded such that 0 = no and 1 = yes.

Perceived behavioral integrity. We used responses to the two items employed by Protas (2013) to assess behavioral integrity ($\alpha = .78$). The items are: “I can trust what managers say in my organization” and “Managers in my organization behave honestly and ethically when dealing with employees and clients or customers.” Responses were on a 4-point scale where 1 = strongly disagree and 4 = strongly agree.

Management ethnic representativeness (subjective). Participant agreement (1 = strongly disagree, 4 = strongly agree) with the following item was used to assess the degree of management ethnic representativeness in their workplace: “Top management in my organization includes about the same percentages of people of different racial, ethnic, and national backgrounds as the rest of the workforce in my organization.”

Ethnic dissimilarity (subjective). To maximize consistency with the first study, we combined and reverse-coded responses inquiring about the ethnic similarity of participants’ supervisor (“Is your supervisor or manager of the same racial or ethnic background as you?”) and coworkers (“About what percentage of your coworkers are of people from your racial, ethnic, or national background?”). Because the responses to these items involved different formats, we standardized each before aggregating them to form an indicator with higher scores indicating greater dissimilarity.

On its face, these measures may seem to tap different constructs, but combining them is actually quite consistent with common practice in the diversity literature. The most common approaches to capturing ethnic dissimilarity involve using either the proportion of ethnically similar individuals in an interactive multilevel model (e.g., level 1 black dummy variable x level

2 percent black employees) or Euclidean distance, which is essentially the square root of the proportion of dissimilar employees. Like our composite, the employee proportions utilized in these two approaches commonly include both coworkers and supervisors. Thus, we feel confident that combining them is theoretically sound and consistent with (though not identical to) prior approaches. Looking at the empirical evidence provides some additional support for our measurement approach. For instance, an exploratory factor analysis revealed a single factor accounting for 76.20% of the variance in the two items. Moreover, Cronbach's Alpha for the two items is .69. Though this level of internal consistency is slightly lower than the commonly used .7 threshold, we contend that this is more a product of only two items being included, as this estimate of internal consistency is influenced by the number of items included.

Control variables. As in Study 1, we used data concerning employee ethnicity, sex, age, and tenure as control variables.

Study 2: Results

The means, standard deviations, and correlations for all variables are located in Table 3. Hypothesis 1, which predicted a negative relationship between management ethnic representativeness and interpersonal mistreatment, was tested using hierarchical logistic regression. After accounting for the influence of the controls, representativeness exhibited the anticipated negative effect ($b = -.40$, $SE = .10$, $p < .01$, $OR = .67$), indicating that employees who perceived their organization as more representative were less likely to indicate that they had experienced interpersonal mistreatment. Thus, Hypothesis 1 was supported. Hypothesis 2 proposed that ethnic dissimilarity moderates the representativeness-mistreatment relationship such that it is more pronounced among employees who are more dissimilar to their workplace counterparts. The dissimilarity x representativeness interaction did not, however, exhibit a

significant relationship with mistreatment ($b = -.08$, $SE = .10$, $p = .44$, $OR = .92$). Consequently, Hypothesis 2 was not supported in this study.

We used SPSS applications introduced by Hayes (2013), Edwards, and Lambert (2007) to compute bootstrapped confidence intervals for our simple and moderated mediation analyses. One reason we may have failed to detect the interaction proposed in Hypothesis 2 is that it may function indirectly. In fact, Hypothesis 3 predicted an indirect effect of management ethnic representativeness on interpersonal mistreatment through perceived behavioral integrity. Hypothesis 4 predicted that ethnic dissimilarity between an individual and others in the workplace moderates this indirect relationship such that the relationship between representativeness and mistreatment is significantly stronger when employees are more dissimilar. Because the dependent variable (i.e., discrimination) is binary, we used logistic regression for testing the Stage 2 effects.

In testing Hypothesis 3, we computed bootstrapped confidence intervals for the indirect effect linking representativeness and mistreatment through perceived behavioral integrity. Though the direct effect remains significant in the presence of the proposed mediator ($b = -.31$, $SE = .10$, $p < .01$), the indirect effect was statistically significant as well ($b = -.12$, $SE = .02$, $p < .01$, 99% $CI = -.18$ to $-.06$). This effect captures significant effects of management ethnic representativeness on perceived behavioral integrity ($b = .13$, $SE = .02$, $p < .01$) as well as perceived behavioral integrity on interpersonal mistreatment ($b = -.86$, $SE = .12$, $p < .01$). This pattern (which some would refer to as partial mediation) supports Hypothesis 3.

Turning to Hypothesis 4, we conducted what amounts to moderated path analysis (see Table 4 for a summary) to determine whether any of the three paths between representativeness and discrimination were moderated by ethnic dissimilarity (Edwards & Lambert, 2007). As

Figure 3 illustrates, the relationship between representativeness and perceived behavioral integrity (Stage 1) was fairly consistent irrespective of how ethnically dissimilar the focal employee was from others in their workplace. However, the effects at Stage 2 (i.e., the behavioral integrity-interpersonal mistreatment linkage) appeared contingent upon ethnic dissimilarity. In fact, the impact of behavioral integrity was nearly twice as strong when dissimilarity was higher (i.e., one SD above the mean) than when it was lower (one SD below the mean; .95 [SE = .13] vs. .51 [SE = .22]). Though both of the conditional indirect effects were statistically significant (low dissimilarity: -.06, SE = .03, 95% CI = -.13 to -.01; high dissimilarity: -.15, SE = .03, 99% CI = -.24 to -.07), the moderation at Stage 2 helped produce a significant difference between the conditional indirect effects (.09, 99% CI = .002 to .173), which indicates the presence of moderated mediation. In short, the negative indirect effect of management ethnic representativeness on mistreatment through perceived behavioral integrity is stronger for employees who are more ethnically dissimilar from their peers. Hence, Hypothesis 4 also received support.

Study 2: Discussion

The results of a nationally representative survey complement and extend the findings of Study 1. Building on the finding that ethnic similarity moderates the relationship between management representativeness and interpersonal mistreatment, we examined perceived behavioral integrity as an explanatory mechanism. Results supported Hypothesis 3, which predicted that perceived behavioral integrity would mediate the relationship between management ethnic representativeness and interpersonal mistreatment at work. Thus, perceived behavioral integrity can be thought of as an explanation for why representativeness engenders experiences of mistreatment in the workplace. Results also supported Hypothesis 4, which

predicted that the indirect effect proposed in Hypothesis 3 would be stronger for ethnically dissimilar employees when compared with those who are more ethnically similar to others in their workplace. Interestingly, this finding of moderated mediation seems to have been driven by the second path in the mediation model, meaning that the relationship between perceived behavioral integrity and interpersonal mistreatment was substantially stronger for employees who were more ethnically dissimilar from others in their workplaces. Thus, while management ethnic representativeness may give rise to perceptions of behavioral integrity for all employees, these perceptions of behavioral integrity may have a stronger effect on interpersonal mistreatment for employees in the minority at work.

Notable shortcomings of Study 2 include the use of cross-sectional to test a mediation model and the use of one- or two-item measures to assess all variables of interest. Additionally, there are inconsistencies with regard to how our independent and dependent variables were measured across studies 1 and 2. Thus, in an effort to reconcile these shortcomings, we have conducted a third study in which we use multi-item measures for all variables of interest in addition to measuring our independent and dependent variables at different time points to appropriately replicate our Study 2 findings. Finally, we employ both objective and subjective measurement strategies to investigate differential effects of objective vs. subjective representativeness and dissimilarity. This allowed us to test a more complex mediation series model in which we expected that objective representativeness (the independent variable) would be positively associated with subjective representativeness (the first mediator), which would then have a positive impact on perceptions of behavioral integrity (the second mediator), which in turn would be negatively associated with interpersonal mistreatment (the dependent variable). We also examined whether this mediation chain is moderated by both objective and subjective

dissimilarity, expecting to find stronger effects for those more ethnically dissimilar to others in their workplaces.

Study 3: Method

Participants and Procedure

The original sample consisted of 330 employees working at least 30 hours per week recruited via Amazon's Mechanical Turk. The sample was 55% male, 61% White, 25% Asian, 7% Black, 4% Hispanic, and 3% were of another ethnicity. The sample had an average age of 35 years old and an average tenure of 6 years with their organization. Of this original sample, 248 participants completed the second time point, for a retention rate of 75%. The sample that completed the study was very similar demographically to the original sample. Indeed, this sample was 52% male, 63% White, 25% Asian, 7% Black, 4% Hispanic, and 1% were of another ethnicity. This sample had an average age of 36 years old and an average tenure of 6 years at their organization. Compensation was provided in the form of \$0.50 for each completed time point. Participants first completed a short web-based survey that contained items related to representativeness, dissimilarity, and perceived behavioral integrity. Then, a few days later, participants were asked to complete a follow-up survey which contained items related to experiences of interpersonal mistreatment at work.

Measures

Management ethnic representativeness (objective). To measure objective management ethnic representativeness as similarly as possible to Study 1, we first asked participants to estimate the percentage of managers/leaders/supervisors in their organization who were from the following ethnic groups: 1) African-American/Black, 2) Asian, Asian American/Pacific Islander, 3) Caucasian/ White American, European, not Hispanic, 4) Chicano(a)/ Mexican American,

Latino(a)/ Hispanic American, 5) Native American/American Indian, 6) Mixed; parents are from two different groups, or 7) Other. We then used each participant's own ethnic group (which was measured using the same categories) and the formula from Avery et al. (2012) to calculate how represented each participant's ethnic group was in management positions within the organization.

Management ethnic representativeness (subjective). To measure subjective management ethnic representativeness, we utilized three items designed to capture participant's perceptions of representativeness in management (sample item: "Top management in my organization includes about the same percentages of people of different racial as the rest of the workforce in my organization"). To develop this scale, we simply broke apart the triple-barrelled item ("Top management in my organization includes about the same percentages of people of different racial, ethnic, and national backgrounds as the rest of the workforce in my organization") utilized to represent this construct in Study 2 into three separate items focusing on racial, ethnic, and national backgrounds, respectively. A principal axis factor analysis with promax rotation revealed that one factor (eigenvalue = 2.69) accounted for 89.73% of the variance. Factor loadings for all three items were greater than .88. Thus, a composite of all three items was created ($\alpha = .96$). The response scale for this measure ranged from 1 (strongly disagree) to 7 (strongly agree).

Ethnic dissimilarity (objective). To measure objective ethnic dissimilarity as similarly as possible to Study 1, we first asked participants to estimate the percentage of others in their organization who were from the following ethnic groups: 1) African-American/Black, 2) Asian, Asian American/Pacific Islander, 3) Caucasian/ White American, European, not Hispanic, 4) Chicano(a)/ Mexican American, Latino(a)/ Hispanic American, 5) Native American/American

Indian, 6) Mixed; parents are from two different groups, or 7) Other. We then used each participant's own ethnic group (which was measured using the same categories) and the Euclidian distance formula, as recommended by Harrison and Klein (2007), to capture the extent to which each individual was dissimilar in ethnic background to all other individuals in their organization. This metric was calculated such that a higher score means that the individual shares his or her ethnic background with a smaller proportion of colleagues.

Ethnic dissimilarity (subjective). To maximize consistency with our previous studies, we combined and reverse-coded responses inquiring about the ethnic similarity of participants' supervisor ("Is your supervisor or manager of the same racial or ethnic background as you?") and coworkers ("About what percentage of your coworkers are of people from your racial, ethnic, or national background?"), just as we did in Study 2. Because the responses to these items involved different formats, we standardized each before aggregating them to form an indicator with higher scores indicating greater dissimilarity.

Perceived behavioral integrity. To measure perceived behavioral integrity, we utilized a five-item scale that included edited versions of both items used to measure this construct in Study 2 in addition to three newly-created items such as "Managers in my organization demonstrate high integrity". To develop this scale, we modelled our new items off of those utilized in Study 2 while seeking to expand coverage of the construct and solve issues with the previously utilized items such as double-barreling and referring to multiple sources of integrity (e.g., we split the previously utilized item "Managers in my organization behave honestly and ethically when dealing with employees and clients or customers" into two items reflecting behaving honestly and ethically, respectively, while focusing these items only on how supervisors interact with employees). A principal axis factor analysis with promax rotation

revealed that one factor (eigenvalue = 4.13) accounted for 82.58% of the variance. Factor loadings for all five items were greater than .83. Thus, a composite of all the items was created ($\alpha = 0.94$). The response scale for this measure ranged from 1 (strongly disagree) to 7 (strongly agree).

Interpersonal mistreatment. To measure interpersonal mistreatment as broadly as possible, and to capture the extent of this mistreatment in a way that was inclusive of our previous two studies, we created an eight-item scale designed to capture experiences of physical violence, harassment, bullying, abuse, discrimination, incivility, and unfair treatment at work (sample item: “In the last 12 months, to what extent have you personally experienced unfair treatment at work from your supervisors?”). To develop this scale, we modelled our new items off of those utilized in Study 1, while correcting issues associated with these items such as being double-barrelled or referring to multiple sources of mistreatment (e.g., supervisors and coworkers). Notably, the shell of each item (i.e., “In the last 12 months, to what extent have you personally experienced X at work from your supervisors?”) remained the same across the scale, and we simply edited the behavior encountered in each item to reflect experiences of physical violence, harassment, bullying, abuse, discrimination, mistreatment, incivility, and unfair treatment. A principal axis factor analysis with promax rotation revealed that one factor (eigenvalue = 6.16) accounted for 76.96% of the variance. Factor loadings for all eight items were greater than .88. Thus, a composite of all the items was created ($\alpha = .96$). The response scale ranged from 1 (to no extent) to 5 (to a very large extent).

Control variables. As in studies 1 and 2, we used data concerning employee ethnicity, sex, age, and tenure as control variables.

Study 3: Results

The means, standard deviations, and correlations for all variables are located in Table 5. Hypothesis 1, which predicted a negative relationship between management ethnic representativeness and interpersonal mistreatment, was tested using multiple regression analysis. After accounting for the effects of our control variables, objective representativeness had an insignificant relationship with interpersonal mistreatment ($b = .39$, $SE = .43$, $p = .37$), while subjective representativeness had a positive relationship with interpersonal mistreatment ($b = .09$, $SE = .03$, $p < .01$), such that higher levels of subjective representativeness were associated with higher levels of interpersonal mistreatment. Thus, Hypothesis 1 was not supported in this study.

Hypothesis 2 proposed that ethnic dissimilarity moderates the representativeness-mistreatment relationship such that it is more pronounced among employees who are more dissimilar to their workplace counterparts. We tested this hypothesis using hierarchical regression analysis. This analysis revealed that none of the dissimilarity (objective or subjective) by representativeness (objective or subjective) interaction terms were significant (all $ps > .06$). Consequently, Hypothesis 2 was not supported in this study.

We used SPSS and Mplus applications introduced by Hayes (2013) and Edwards and Lambert (2007) to compute bootstrapped confidence intervals for our simple and moderated mediation analyses. One reason we may have failed to detect the main effects proposed in Hypothesis 1 and the interaction effects proposed in Hypothesis 2 is that they may function indirectly. Indeed, Hypothesis 3 predicted an indirect effect of management ethnic representativeness on interpersonal mistreatment through perceived behavioral integrity. Hypothesis 4 predicted that ethnic dissimilarity between an individual and others in the

workplace moderates this indirect relationship such that the linkage between representativeness and mistreatment is significantly stronger when employees are more dissimilar.

In testing Hypothesis 3, we computed bootstrapped confidence intervals for the indirect effect linking objective representativeness and mistreatment through perceived representativeness (the first mediator in the series) and perceived behavioral integrity (the second mediator in the series). Although the direct effect is insignificant in the presence of the mediators and control variables ($b = -.15$, $SE = .43$, $p = .73$), the indirect effect was statistically significant ($b = -.17$, $SE = .07$, 95% $CI = -.36$ to $-.07$). This effect captures the significant positive effect of objective representativeness on subjective representativeness ($b = 3.87$, $SE = .81$, $p < .01$), which supports Hypothesis 5, which in turn had a significant positive effect on perceived behavioral integrity ($b = .25$, $SE = .05$, $p < .01$), which in turn had a significant negative effect on interpersonal mistreatment ($b = -.18$, $SE = .05$, $p < .01$). This pattern (which some would refer to as full mediation) supports Hypothesis 3 via the significant indirect effect and all individual paths estimated in the anticipated direction.

Turning to Hypothesis 4, we conducted what amounts to moderated path analysis to determine whether our serial indirect effect from Hypothesis 3 was moderated by objective or subjective dissimilarity (Edwards & Lambert, 2007). Perhaps due to multicollinearity and/or our relatively low sample size as compared to studies 1 and 2, we did not find evidence that the serial mediation effect we found in support of Hypothesis 3 varied significantly across levels of objective or subjective dissimilarity. Seeking to demonstrate the robustness of our findings from studies 1 and 2, we followed up on this analysis with more exploratory analyses based on simpler moderated mediation models. Specifically, we found that the simple indirect effect of objective management ethnic representativeness on interpersonal mistreatment via perceived behavioral

integrity varied across levels of objective ethnic dissimilarity, such that this indirect effect was significantly negative for those high on objective dissimilarity ($b = -.22$, $SE = .14$, 95% $CI = -.59$ to $-.02$), but significantly positive for those lower on ethnic dissimilarity ($b = .36$, $SE = .22$, 95% $CI = .05$ to $.93$). The difference between these conditional indirect effects was also significant (difference = $-.80$, $SE = .41$, 95% $CI = -1.86$ to $-.21$). Notably, this finding replicates our reverse discrimination finding from Study 1 by showing that individuals who are low on objective ethnic dissimilarity may actually perceive more mistreatment when objective management ethnic representativeness is high. Additionally, we found contrasting results for the simple indirect effect of subjective management ethnic representativeness on interpersonal mistreatment via perceived behavioral integrity across levels of subjective ethnic dissimilarity, such that this indirect effect was significantly negative for those high on subjective ethnic dissimilarity ($b = -.04$, $SE = .02$, 95% $CI = -.09$ to $-.02$), but not significant for those who were low on subjective ethnic dissimilarity ($b = -.02$, $SE = .02$, 95% $CI = -.06$ to $.001$). However, the difference between these two indirect effects was not statistically significant (difference = $-.01$, $SE = .01$, 95% $CI = -.03$ to $.01$). Collectively, these results provide mild support for Hypothesis 4 in this study.

Study 3: Discussion

The results of this data collection complement, corroborate, and extend the findings of our previous studies. Building on the findings that ethnic similarity moderates, and perceived behavioral integrity mediates, the relationship between management representativeness and interpersonal mistreatment, we sought to replicate these findings in Study 3 while measuring our independent and dependent variables at different time points, using multi-item measures for all variables of interest, and employing both objective and subjective measurement strategies for our variables related to representativeness and dissimilarity. Results again supported Hypothesis 3,

which predicted that perceived behavioral integrity would mediate the relationship between management ethnic representativeness and interpersonal mistreatment at work. Additionally, we extended this analysis to include subjective representativeness as a more proximal mediator in the process by which objective representativeness has its impact on perceived behavioral integrity and, in turn, interpersonal mistreatment in the workplace. Testing this mediation series provided evidence for full mediation, indicating that it may be important to consider both objective and subjective metrics of representativeness when conducting future studies on this phenomenon. Results also provided some support for Hypothesis 4, which predicted that the indirect effect proposed in Hypothesis 3 would be stronger for ethnically dissimilar employees when compared with those who are more ethnically similar to others in their workplace. Interestingly, we observed stronger moderated mediation effects when management ethnic representativeness and ethnic dissimilarity were measured objectively (as opposed to subjectively).

While our short time lag in this study likely helped to reduce common method bias, it is important to note that our method here does not rule out the possibility of reverse causation. Indeed, it may be the case that experiences of interpersonal mistreatment caused decreases in perceptions of behavioral integrity or representativeness, rather than the opposite causal ordering stipulated by our theoretical model. Finally, a limitation of Study 3 is that although we attempted to measure representativeness and dissimilarity using both objective and subjective strategies, these variables remain perceptual in nature. While we acknowledge that this is less than ideal, we would also point out that our measures of objective and subjective representativeness ($r = .33$) and objective and subjective dissimilarity ($r = -.03$) were 1) not strongly related to one another and 2) have differing relationships with our outcomes of interest (see Table 5). Thus, we are

confident that although these variables are perceptual in nature, they appear to have at the very least captured different aspects of our variables of interest.

General Discussion

We conducted three complementary studies to investigate the relationship between management ethnic representativeness and interpersonal mistreatment at work. Results support our conceptual model: management ethnic representation is negatively related to interpersonal mistreatment through the mediating mechanism of perceived behavioral integrity, with effects being stronger for ethnically dissimilar individuals when compared with those who are more ethnically similar to others in their organization.

Theoretical Implications

Theoretically speaking, this work emphasizes the value of signaling theory to explain why and for whom signals from an organization may have an impact on individuals currently working within an organization. This is an important departure from previous uses of signaling theory that tend to focus solely on organizational outsiders as receivers of organizational signals (Connelly et al., 2011). In our view, researchers seeking to use signaling theory to explain reactions from current employees might actually observe stronger effects when compared with the effects of similar signals on organizational outsiders. We make this assertion because of the signaling theory concepts of signal observability and signal frequency discussed earlier. Recall that research has shown that 1) more visible signals are more effective (Miller & Triana, 2009), and 2) increasing signal frequency improves the likelihood that a signal will be interpreted correctly (Filatotchev & Bishop, 2002). Thus, it stands to reason that current employees, by virtue of being in the office every day, may be more likely to observe a signal and interpret it correctly due to the relatively high signal frequency, making them more likely to incorporate

these signals into their sense-making processes. This assertion also indicates that employees who telecommute or are not physically present in the workplace as frequently may not be as affected by organizational signals when compared with more traditional employees.

Our work is also a critical departure from traditional views of relational demography, which typically focus on whether supervisor-subordinate or coworker pairs share demographic characteristics (e.g., Avery et al., 2008). Indeed, by shifting our perspective to the management ethnic representativeness in the organization as a whole, our work shows that ethnically dissimilar others attend to the demographic makeup of managers throughout the organization as opposed to focusing solely on their own supervisor. We argued in the introduction that management ethnic representativeness of managers may serve as a particularly powerful signal to employees within the organization due to their relatively high status in those organizations. This argument was supported by our findings, indicating that when examining relational demography, it is important not only to consider representativeness within the organization as a whole, but also to consider the level and relative status of representativeness in predicting interpersonal mistreatment at work.

Overall, our model and findings suggest that employees, especially employees ethnically dissimilar from others in the organization, interpret signals from their organizations through the lens of representativeness. Specifically, this paper supports the value of examining interpersonal mistreatment as an outcome of interest as opposed to focusing solely on discrimination in the workplace. Following Devine's (1989) seminal work on the manifestations of bias beyond one's conscious control, several authors have argued and supported the notion that modern discrimination manifests itself in numerous forms that vary in terms of their subtlety and severity (e.g., Brief, Dietz, Cohen, & Pugh 2000; Swim, Mallett, & Stangor, 2004; Jones et al., 2013).

Despite these advances, many research studies still focus solely on overt discrimination rather than examining interpersonal mistreatment in a more holistic manner. Importantly, by demonstrating similar effects when examining both interpersonal mistreatment and ethnic discrimination as outcome variables across three separate samples, our work indicates that researchers may want to expand the construct space when examining discrimination to include other forms of mistreatment such as harassment, bullying, and abuse.

Finally, our work supports the notion that perceived behavioral integrity is an explanatory mechanism that helps account for the relationship between management ethnic representativeness and interpersonal mistreatment at work. This finding highlights the importance of appearing authentic when presenting incumbent employees with equal opportunity initiatives. Indeed, previous research has indicated that in addition to numeric representation, organizations must portray an authentic commitment to diversity that exceeds superficial attempts to truly develop a reputation for valuing diversity (e.g., Smith, Botsford Morgan, King, Knight, & Hebl, 2012). Our work supports the idea that having management be highly representative of the organization as a whole may be a way to communicate equal opportunity for all incumbent employees, which could then serve to curb experiences of mistreatment in the workplace. However, it is important to note that an organization must also have some baseline of heterogeneity with regard to the ethnicity of their employees in order for management ethnic representativeness to signal that the organization genuinely values diverse perspectives. Indeed, if an organization consists of only White employees, that organization could have perfect management ethnic representativeness (thus communicating equal opportunities for incumbent employees) while also communicating that they do not value a diversity of perspectives whatsoever. Additionally, our Study 3 findings support the notion that subjective perceptions of

representativeness may serve as a more proximal explanatory mechanism by which objective representativeness has its impact on perceived behavioral integrity and, in turn, on interpersonal mistreatment. These findings speak to the theoretical importance of considering both objective and subjective indicators of management ethnic representativeness and ethnic dissimilarity in future work.

Practical Implications

Practically speaking, our work provides organizational leaders with a (somewhat) controllable variable to focus on – management ethnic representativeness – when seeking to reduce experiences of mistreatment within their organizations. Notably, most organizations likely already have the data they need to calculate this focal construct. Perhaps the most important practical contribution of our work is showing that incumbent employees look beyond simple diversity aggregates to management ethnic representativeness across organizational levels for cues about the quality of their employers. Indeed, we argued in the introduction that representativeness in management may be a particularly salient signal for ethnically dissimilar employees, and this assertion was confirmed by findings from our studies. Thus, management ethnic representativeness appears to have significant symbolic value to employees, especially employees ethnically dissimilar from others in the organization, indicating that organizations should proactively manage this variable to ensure they are sending desired signals to their employees. One way this can be accomplished is by using career development, training, and mentoring programs to 1) identify and develop qualified ethnically dissimilar employees for management positions and 2) ensure that the pathways to advancement for all employees are clear (see Lindsey, King, McCausland, Jones, & Dunleavy, 2013). Finally, our work provides proximal indicators of interpersonal mistreatment in the form of our perceived behavioral

integrity and subjective perceptions of representativeness mediators, meaning that organizations could measure these variables and attempt to take corrective action before perceptions of integrity and representativeness potentially engender experiences of mistreatment later in time.

Limitations and Future Research Directions

These compelling findings should be interpreted in light of the studies' limitations. One limitation is our reliance on dichotomous outcomes (in the first two studies) to account for experiences of mistreatment and discrimination in the workplace. Concerns surrounding this limitation, however, should be somewhat assuaged by the fact that we observed similar effects across the two studies and a third involving a continuous measure. Another limitation of these studies is our reliance on single-source, self-report data for our outcomes and mediators of interest. However, we would note that self-report measures are likely the most reliable and accurate way to measure perceived behavioral integrity and interpersonal mistreatment. Additionally, the fact that we observed similar effects of our objective predictors (i.e., ethnic management representativeness and ethnic dissimilarity) on these perceptual variables across different samples should serve to alleviate concerns surrounding this limitation.

This work presents several avenues for future research endeavors. First, our concept of management ethnic representativeness could be applied to other stigmatized groups in organizations. For instance, does management gender representativeness have similar effects on underrepresented women in the workplace? Does management age representativeness have similar effects on underrepresented older or younger workers? Second, future work could examine other mediators in the process by which management representativeness impacts interpersonal mistreatment in the workplace. We believe that justice perceptions, trust in management, and diversity climate are excellent candidates to be included in future mediation

models. Third, future research could consider the interactive effects between management representativeness and relational demography in predicting organizational outcomes. For instance, does one's level of representativeness within their community moderate the relationship between management representativeness and interpersonal mistreatment at work? Fourth, additional work should examine the degree to which management ethnic representativeness interacts with other diversity initiatives (e.g., diversity training programs, inclusion policies) in predicting diversity-related outcomes. For example, can a strong diversity training program curb mistreatment experiences when management ethnic representativeness is lacking? Finally, given that previous research has shown that relational demography can influence performance outcomes (King et al., 2011; Avery et al., 2012), a natural direction for future research is to expand on the outcomes we have addressed here to include employee and organizational performance. In our view, this could be a powerful way to demonstrate the bottom line effect of having management ethnic representativeness in one's organization.

Conclusion

Overall, our findings confirm that misalignments in the demographic representation of managers can send problematic signals about interpersonal interactions to minority employees. We have made an important theoretical contribution by showing that signaling theory can be used to explain phenomena occurring within organizations as opposed to focusing solely on external stakeholder. Finally, we have made an important practical contribution by showing that organizations should strive for representativeness in their management positions if they hope to maximize perceptions of behavioral integrity, thereby minimizing experiences of mistreatment for ethnically dissimilar individuals in the workplace.

References

- Asgari, S., Dasgupta, N., & Stout, J. G. (2012). When do counterstereotypic ingroup members inspire versus deflate? The effect of successful professional women on young women's leadership self-concept. *Personality and Social Psychology Bulletin*, 38, 370-383.
- Avery, D. R., McKay, P. F., Tonidandel, S., Volpone, S. D., & Morris, M. A. (2012). Is there method to the madness? Examining how racioethnic matching influences retail store productivity. *Personnel Psychology*, 65, 167-199.
- Avery, D. R., McKay, P. F., & Wilson, D. C. (2008). What are the odds? How demographic similarity affects the prevalence of perceived employment discrimination. *Journal of Applied Psychology*, 93, 235-249.
- Berdahl, J. L. (2007). Harassment based on sex: Protecting social status in the context of gender hierarchy. *Academy of Management Review*, 32, 641-658.
- Bond, J. T., Thompson, C., Galinsky, E., & Prottas, D. (2003). The 2002 national study of the changing workforce. New York: Families and Work Institute.
- Brief, A. P., Dietz, J., Cohen, R. R., Pugh, S. D., & Vaslow, J.B. (2000). Just doing business: Modern racism and obedience to authority as explanations for employment discrimination. *Organizational Behavior and Human Decision Processes*, 81, 72-97.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The leadership quarterly*, 17, 595-616.
- Certo, S. T. (2003). Influencing initial public offering investors with prestige: Signaling with board structures. *Academy of Management Review*, 28, 432-446.

- Certo, S. T., Daily, C. M., & Dalton, D. R. (2001). Signaling firm value through board structure: An investigation of initial public offerings. *Entrepreneurship Theory and Practice*, 26, 33-50.
- Chen, G., Bliese, P. D., & Mathieu, J. E. (2005). Conceptual framework and statistical procedures for delineating and testing multilevel theories of homology. *Organizational Research Methods*, 8, 375-409.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37, 39-67.
- Dawson, J. F. (2014). Moderation in management research: What, why, when and how. *Journal of Business and Psychology*, 29, 1-19.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5–18.
- Durcikova, A., & Gray, P. (2009). How knowledge validation processes affect knowledge contribution. *Journal of Management Information Systems*, 25, 81-107.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytic framework using moderated path analysis. *Psychological Methods*, 12, 1–22.
- Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on workgroup processes and outcomes. *Administrative Science Quarterly*, 46, 229–273.
- Filatotchev, I., & Bishop, K. (2002). Board composition, share ownership, and “underpricing” of U.K. IPO firms. *Strategic Management Journal*, 23, 941-955.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.

- Foley, S., Linnehan, F., Greenhaus, J. H., & Weer, C. H. (2006). The impact of gender similarity, racial similarity, and work culture on family-supportive supervision. *Group & Organization Management*, 31, 420–441.
- Gulati, R., & Higgins, M. C. (2003). Which ties matter when? The contingent effects of interorganizational partnerships on IPO success. *Strategic Management Journal*, 24, 127-144.
- Haddock, C. K., Rindskopf, D., & Shadish, W. R. (1998). Using odds ratios as effect sizes for meta-analysis of dichotomous data: a primer on methods and issues. *Psychological Methods*, 3, 339.
- Harrison, D. A., & Klein, K. J. (2007). What's the difference? Diversity constructs as separation, variety, or disparity in organizations. *Academy of Management Review*, 32, 1199-1228.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Press.
- Health and Social Care Information Centre (2011). NHS Staff – 2000-2010, Overview. Accessed June 8, 2016 from <http://www.hscic.gov.uk/catalogue/PUB02041/nhs-staf-over-2000-2010-pra.pdf>.
- Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57, 657–672.
- Highhouse, S., Thornbury, E. E., & Little, I. S. (2007). Social-identity functions of attraction to organizations. *Organizational Behavior and Human Decision Processes*, 103, 134-146.
- Jackson, S. E., Stone, V. K., & Alvarez, E. B. (1993). Socialization amidst diversity: The impact of demographics on work team oldtimers and newcomers. In L. L. Cummings & B. M.

- Staw (Eds.), *Research in organizational behavior* (Vol. 16, pp. 45–109). Greenwich, CT: JAI Press.
- Janney, J. J., & Folta, T. B. (2003). Signaling through private equity placements and its impact on the valuation of biotechnology firms. *Journal of Business Venturing*, 18, 361-380.
- Jones, K. P., Peddie, C. I., Gilrane, V. L., King, E. B., & Gray, A. L. (2013). Not so subtle a meta-analytic investigation of the correlates of subtle and overt discrimination. *Journal of Management*, 42, 1588-1613.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York: Basic Books.
- King, E. B., Dawson, J. F., West, M. A., Gilrane, V. L., Peddie, C. I., & Bastin, L. (2011). Why organizational and community diversity matter: Representativeness and the emergence of incivility and organizational performance. *Academy of Management Journal*, 54, 1103-1118.
- King, E. B., Hebl, M. R., George, J. M., & Matusik, S. F. (2010). Understanding tokenism: Negative consequences of perceived gender discrimination in male-dominated organizations. *Journal of Management*, 36, 482–510.
- Kossek, E. E., Markel, K. S., & McHugh, P. P. (2003). Increasing diversity as an HRM change strategy. *Journal of Organizational Change Management*, 16, 328–352.
- Leslie, L. M. (2014). A status-based multilevel model of ethnic diversity and work unit performance. *Journal of Management*, 1-29.
- Latu, I. M., Mast, M. S., Lammers, J., & Bombari, D. (2013). Successful female leaders empower women's behavior in leadership tasks. *Journal of Experimental Social Psychology*, 49, 444-448.

- Lee, P. (2001). What's in a name .com? The effects of “.com” name changes on stock prices and trading activity. *Strategic Management Journal*, 22, 793-804.
- Lester, R. H., Certo, S. T., Dalton, C. M., Dalton, D. R., & Cannella, A. A. (2006). Initial public offering investor valuations: An examination of top management team prestige and environmental uncertainty. *Journal of Small Business Management*, 44, 1-26.
- Lim, S., & Cortina, L. M. (2005). Interpersonal mistreatment in the workplace: the interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology*, 90, 483-496.
- Lindsey, A., King, E., McCausland, T., Jones, K., & Dunleavy, E. (2013). What we know and don't: Eradicating employment discrimination 50 years after the Civil Rights Act. *Industrial and Organizational Psychology*, 6, 391-413.
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. *Journal of Applied Psychology*, 91, 777-785.
- Major, B., & Sawyer, P. J. (2009). Attributions to discrimination: Antecedents and consequences. *Handbook of Prejudice, Stereotyping, and Discrimination*, 89-110.
- McGuire, J. (1984). Search for the self: Going beyond self-esteem and the reactive self. In R. A. Zucker, J. Aronoff & A. I. Rabin (Eds.), *Personality and the Prediction of Behaviour*, 73-120. New York: Academic Press.
- McKay, P. F., & Avery, D. R. (2006). What has race got to do with it? Unraveling the role of racioethnicity in job seekers' reactions to site visits. *Personnel Psychology*, 59, 395-429.

- McKay, P. F., Avery, D. R., & Morris, M. A. (2008). Mean racial-ethnic differences in employee sales performance: The moderating role of diversity climate. *Personnel Psychology*, 61, 349-374.
- Miller, T., & del Carmen Triana, M. (2009). Demographic diversity in the boardroom: Mediators of the board diversity–firm performance relationship. *Journal of Management Studies*, 46, 755-786.
- Pelled, L. H., Ledford, G. E., & Mohrmon, S. A. (1999). Demographic dissimilarity and workplace inclusion. *Journal of Management Studies*, 36, 1013–1031.
- Perkins, S. J., & Hendry, C. (2005). Ordering top pay: Interpreting the signals. *Journal of Management Studies*, 42, 1443-1468.
- Prottas, D. J. (2013). Relationships among employee perception of their manager’s behavioral integrity, moral distress, and employee attitudes and well-being. *Journal of Business Ethics*, 113, 51-60.
- Pugh, S. D., Dietz, J., Brief, A. P., & Wiley, J. W. (2008). Looking inside and out: the impact of employee and community demographic composition on organizational diversity climate. *Journal of Applied Psychology*, 93, 1422-1428.
- Ring, P. S., & Van de Ven, A. H. (1989). Formal and informal dimensions of transactions. In A. H. Van de Ven, H. L. Angle, & M. S. Poole (Eds.), *Research on the management of innovation: The Minnesota studies* (pp. 171–192). New York: Ballinger.
- Roberson, Q. M., & Stevens, C. K. (2006). Making sense of diversity in the workplace: organizational justice and language abstraction in employees' accounts of diversity-related incidents. *Journal of Applied Psychology*, 91, 379-391.

- Rynes, S. L. (1991). Recruitment, job choice, and post-hire consequences: A call for new research directions. In M. D. Dunnette & L. M. Howe (Eds.), *Handbook of industrial and organizational psychology*, (pp. 399-444). Palo Alto, CA: Consulting Psychologists Press.
- Simons, T. (2002). Behavioral integrity: The perceived alignment between managers' words and deeds as a research focus. *Organization Science*, 13, 18–35.
- Simons, T., Friedman, R., Liu, L. A., & McLean Parks, J. (2007). Racial differences in sensitivity to behavioral integrity: attitudinal consequences, in-group effects, and "trickle down" among Black and non-Black employees. *Journal of Applied Psychology*, 92, 650-665.
- Simpson, B., & Walker, H. A. (2002). Status characteristics and performance expectations: A reformulation. *Sociological Theory*, 20, 24 – 40.
- Smith, A. N., Morgan, W. B., King, E. B., Hebl, M. R., & Peddie, C. I. (2012). The ins and outs of diversity management: the effect of authenticity on outsider perceptions and insider behaviors. *Journal of Applied Social Psychology*, 42(S1), E21-E55.
- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, 92, 434-459.
- Srivastava, J. (2001). The role of inferences in sequential bargaining with one-sided incomplete information: Some experimental evidence. *Organizational Behavior and Human Decision Processes*, 85, 166-187.
- Swim, J. K., Mallett, R., & Stangor, C. 2004. Understanding subtle sexism: Detection and use of sexist language. *Sex Roles*, 51, 117-128.

- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7–24). Chicago: Nelson-Hall.
- Thomas, D. A. (1999). Beyond the simple demography-power hypothesis: How blacks in power influence white-mentor black-protégé developmental relationships. In A. J. Murrell, F. J. Crosby, & R. J. Ely (Eds.), *Mentoring dilemmas: Developmental relationships within multicultural organizations*, (pp. 157-170). Mahwah, NJ: Lawrence Erlbaum.
- Tsui, A. S., & Gutek, B. A. (1999). *Demographic differences in organizations: Current research and future directions*. Lanham, MD: Lexington Books.
- Tsui, A. S., & O'Reilly, C. A., III. (1989). Beyond simple demographic effects: The importance of relational demography in superior–subordinate dyads. *Academy of Management Journal*, 32, 402– 423.
- van der Walt, N. and Ingley, C. (2003). Board dynamics and the influence of professional background, gender and racial diversity of directors. *Corporate Governance*, 11, 218–34.
- Walsh, J. P., & Ungson, G. R. (1991). Organizational memory. *Academy of Management Review*, 16, 57–91.
- Weick, K. E. (1979). *The social psychology of organization*. Reading, MA: Addison Wesley.
- Weick, K. E. (1995). *Sensemaking in organizations*. Thousand Oaks, CA: Sage.
- Westphal, J. D., & Zajac, E. J. (2001). Decoupling policy from practice: The case of stock repurchase programs. *Administrative Science Quarterly*, 46, 202-228.
- Zahavi, A., & Zahavi, A. (1997). *The handicap principle: A missing piece of Darwin's puzzle*. Oxford, UK: Oxford University Press.

Footnote

¹While the reliability of measures based on low response rates is imperfect, there is evidence to suggest that the overall validity should not be a significant problem: the overall profile of respondents in terms of ethnic group is very similar to that of the National Health Service as a whole. Specifically, the comparison of the five different ethnic groupings that we use are as follows: White (85.2% in our sample, 83.6% overall); Asian (8.0%; 8.2%); Black (4.2%; 5.3%); Mixed (1.1%; 1.4%); and Other (1.6%; 1.5%). Therefore, the overall validity of the measure seems reasonable, but the reliability on an organizational level is worth further examination. As management ethnic representativeness is an index for which the psychometric properties under different response rates has not been well tested, we ran a simulation study in R to examine the likely reliability of this metric. Specifically, we used actual organization sizes, observed ethnic group proportions, and assumed random responses with an average response rate of 51% (as observed, but with the observed variation across organizations). Across 10,000 simulations, the value of management ethnic representativeness calculated from the sample correlated with the actual value of management ethnic representativeness with a median level of 0.955, and a minimum level of 0.920. This therefore suggests that the reliability of management ethnic representativeness on such a sample is very strong, and certainly better than the reliability of most constructs used in applied psychology research generally. This is largely due to the substantial within-organization sample sizes. Likewise, under the same simulation conditions, we examined what happens to ethnic dissimilarity measures, but separately for different ethnic groups. The correlations here were even higher: even the smallest correlations across 10,000 simulations exceeded 0.99 for all ethnic groups. Overall, therefore, we believe that both the management ethnic representativeness and ethnic dissimilarity measures are valid and reliable despite the response rate.

Table 1. Descriptive statistics and correlations of Study 1 variables.

	Mean	SD	Correlations					
			1.	2.	3.	4.	5.	6.
1. Interpersonal mistreatment	16%	36%						
2. Management ethnic representativeness	0.94	0.04	-.01					
3. Ethnic dissimilarity	0.31	0.39	.04	-.30				
4. Sex ^a	0.20	0.40	-.01	-.02	.13			
5. Age ^b	3.77	1.07	.02	.03	-.10	-.01		
6. Length of service ^b	3.96	1.59	.01	.07	-.17	-.08	.51	
7. Ethnic group: White	85%	36%	-.04	.21	-.94	-.12	.09	.16
8. Ethnic group: Black/Black British	4%	20%	.03	-.16	.44	.01	-.00	-.07
9. Ethnic group: Asian/Asian British	8%	27%	.02	-.12	.66	.12	-.09	-.13
10. Ethnic group: Mixed	1%	11%	.02	-.03	.27	.02	-.04	-.04
11. Ethnic group: Other	2%	13%	.02	-.06	.31	.06	-.02	-.04

^a Sex: 1 = male, 0 = female.

^b Age and length of service both measured ordinally (scale from 1-6).

$p < .05$ for all correlations except those between sex and age, and age and Black/Black British ethnic group.

Descriptive statistics and correlations for multi-category variables occupational group and ethnic background not shown, but are available on request.

Table 2. Results of multilevel binary logistic regression hypothesis tests – Study 1.

	Model 1		Model 2	
	Coefficient (SE)	Odds ratio	Coefficient (SE)	Odds ratio
Occupational group:				
Medical/dental	-0.29 (0.05)***	0.75	-0.29 (0.06)***	0.75
Allied health professionals	-0.21 (0.04)***	0.81	-0.21 (0.04)***	0.81
Administrative	-0.25 (0.04)***	0.78	-0.25 (0.04)***	0.78
Managers	-0.01 (0.09)	0.99	-0.02 (0.09)	0.99
Maintenance/ancillary	-0.15 (0.06)*	0.86	-0.15 (0.06)*	0.86
Other	-0.05 (0.06)	0.95	-0.05 (0.06)	0.95
Ethnic group:				
Black/Black British	0.35 (0.05)***	1.42	0.14 (0.12)	1.42
Asian/Asian British	0.22 (0.04)***	1.25	0.01 (0.12)	1.25
Mixed	0.40 (0.11)***	1.50	0.17 (0.17)	1.50
Other	0.42 (0.08)***	1.53	0.19 (0.14)	1.53
Sex (Male)	-0.07 (0.03)*	0.93	-0.07 (0.03)*	0.93
Age	0.06 (0.01)***	1.07	0.06 (0.01)***	1.07
Length of service	0.00 (0.01)	1.00	0.01 (0.01)	1.00
Representativeness	-0.43 (0.43)	0.65	0.73 (0.70)	0.65
Ethnic dissimilarity			1.97 (0.86)*	7.19
Interaction			-1.87 (2.19)*	0.15

Reference category for occupational group is nurses.

Reference category for ethnic group is White.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Means, standard deviations, and correlations for Study 2.

Variable	M	SD	1	2	3	4	5	6	7	8	9
1) Female	.55	.50	--								
2) Black	.11	.31	.07**	--							
3) Hispanic	.07	.25	-.00	--	--						
4) Other Ethnicity	.06	.23	-.02	--	--	--					
5) Tenure	8.37	8.68	-.09**	-.05*	-.04	.02	--				
6) Age	41.61	12.38	.02	-.07**	-.07**	-.00	.48**	--			
7) Representativeness	2.62	1.12	-.01	-.11**	.01	.03	-.01	.00	--		
8) Ethnic Dissimilarity	.07	.87	-.01	.35**	.25**	.22**	-.04	-.07**	-.08**	--	
9) Behavioral Integrity	1.97	.86	-.04	.09**	-.02	.01	.09**	.04	-.18**	.07**	--
10) Mistreatment	.06	.24	-.03	.16**	.09**	.03	.04	.02	-.13**	.24**	.23**

Note. N = 1,575. Female (female = 1) and ethnicity (White = referent) are dummy coded. * $p < .05$; ** $p < .01$.

Table 4. Moderated mediation analysis of effects: Management ethnic representativeness on ethnic discrimination, as moderated by ethnic dissimilarity in Study 2.

Moderator variable	Stage		Effect		
	First	Second	Direct	Indirect	Total
Ethnic Dissimilarity					
Low	.11** (.03)	-.51* (.22)	-.21 (.19)	-.06* (.03)	-.27
High	.15** (.03)	-.95** (.13)	-.29** (.11)	-.15** (.03)	-.44**
Differences	.04	.44*	.08	.09*	.17

Note. N = 1,575. Numbers in parentheses are standard errors. Tests of differences for the indirect and total effect were based on bias-corrected confidence intervals derived from bootstrap estimates.* $p < .05$; ** $p < .01$.

Table 5. Means, standard deviations, and correlations for Study 3.

Variable	M	SD	1	2	3	4	5	6	7	8	9
1) Representativeness (Objective)	.82	.15	--								
2) Representativeness (Subjective)	4.10	1.74	.33**	--							
3) Dissimilarity (Objective)	.60	.35	-.41**	-.01	--						
4) Dissimilarity (Subjective)	0.0	1.10	-.09	-.03	.04	--					
5) Perceived Behavioral Integrity	5.11	1.29	-.01	.20**	-.05	-.05	--				
6) Interpersonal Mistreatment	1.64	.91	.05	.20**	.24**	.05	-.22**	--			
7) Gender	.55	.50	.02	.15*	-.03	-.03	.11	.11	--		
8) Ethnicity	.61	.49	.00	-.10	-.36**	.01	-.02	-.24**	-.16**	--	
9) Tenure	5.81	5.70	.14*	.08	-.16**	-.04	.12*	-.14*	.03	.07	--
10) Age	34.83	11.09	.07	-.03	-.24**	-.07	.13*	-.27**	-.01	.26**	.41**

Note. * $p < .05$; ** $p < .01$. Gender is coded 1 = male and 0 = female. Ethnicity is coded 1 = White and 2 = minority.

Figure 1. Theoretical model.

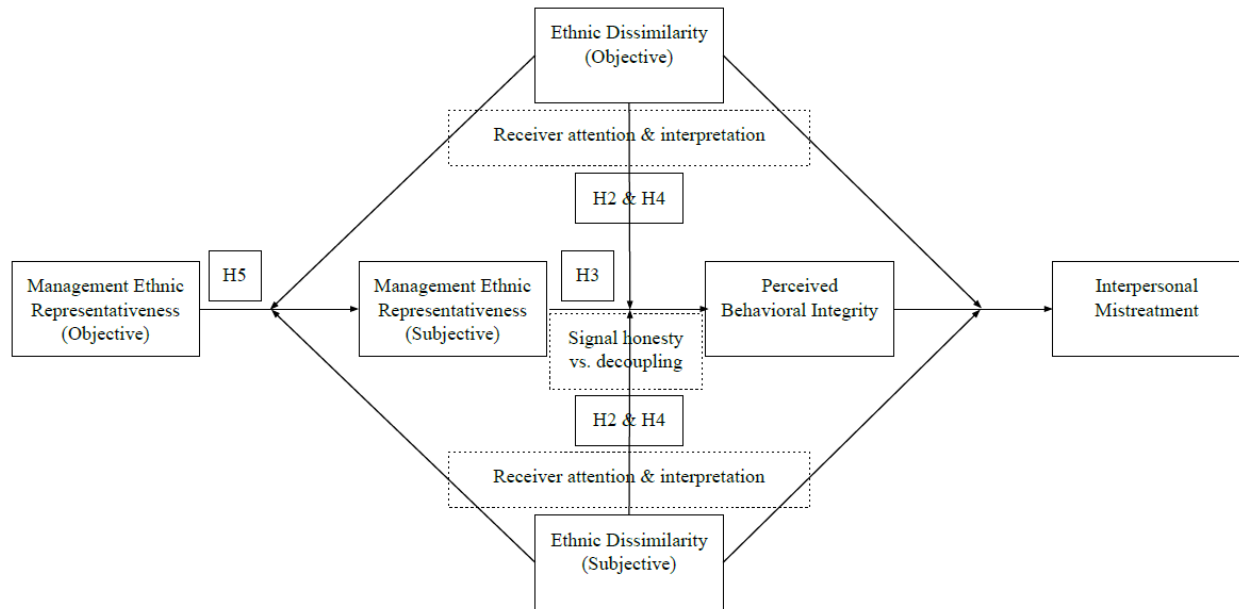


Figure 2. Moderating effect of ethnic dissimilarity on the relationship between management ethnic representativeness and interpersonal mistreatment – Study 1.

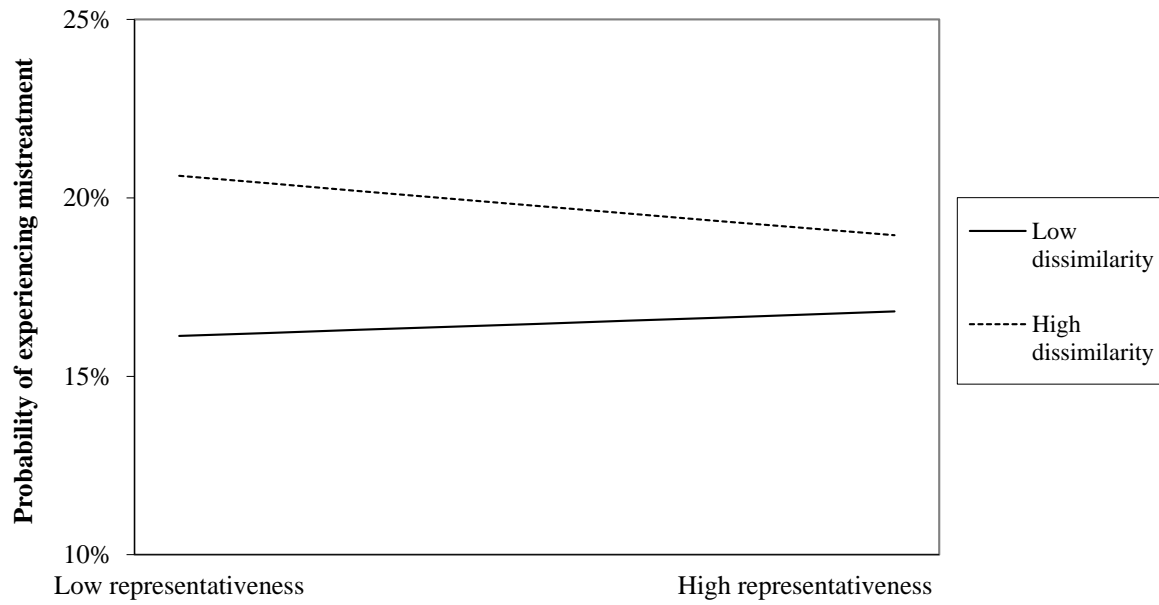
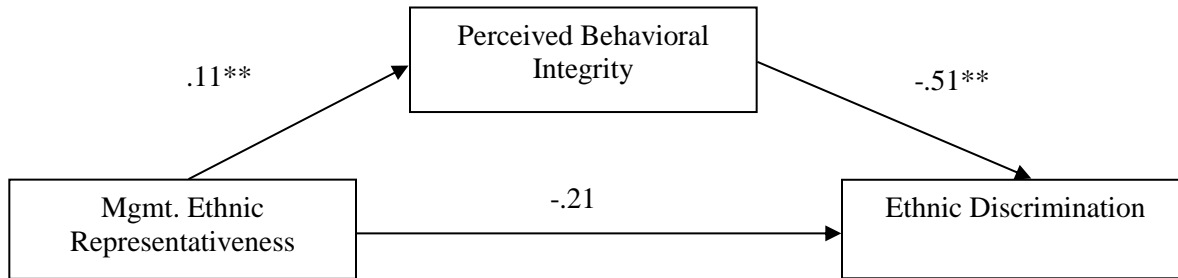


Figure 3. The interactive effects of management ethnic representativeness and ethnic dissimilarity on perceived behavioral integrity and ethnic discrimination – Study 2.

Low Ethnic Dissimilarity



High Ethnic Dissimilarity

